

determined number of groups of cut amorphous metal strips arranged in a step-lap joint pattern, the segment having been formed and annealed and the segment being adapted by the presence of said pattern to be joined in a step-lap joint in said segmented transformer core, said transformer core segment having a C-segment, I-segment, or straight segment construction.

### **REMARKS**

In order to emphasize the patentable distinctions of applicant's invention over the prior art, Claim 1 has been amended to incorporate the limitations of dependent claim 4 and claim 4 has been cancelled, without prejudice. As amended, claim 1 calls for at least one of the segments of the transformer core to be a C-segment, an I-segment, or a straight segment. Claim 28 has been amended to require that the segment be one of a C-segment, an I-segment, or a straight segment. Each of these amendments is clearly supported by the original specification, particularly at page 3, lines 7-9; page 6, lines 6-7; page 8, lines 16-18, and original claim 4. Consequently, no new matter has been added by the amendments.

Applicants' invention as recited by present claims 1, 7, 14-18, 20-25, and 28-36 provides a transformer core, segments for the construction thereof, and a transformer comprising such a core. Generally stated, each of the segments comprises a plurality of packets, and each of the packets comprises a pre-determined number of groups of cut amorphous metal strips arranged in a step-lap joint pattern. The segments are formed and then annealed, and the core is subsequently assembled from the formed and annealed segments. The core comprises at least one segment which is a C-segment, an I-segment, or a straight segment.